Gates & Cooper LLP
Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, California 90045

FAX TRANSMISSION TO USPTO

TO: Commissioner for Patents
Attn: **Examiner Le V. Nguyen**
Patent Examining Corps
Facsimile Center
Alexandria, VA 22313-1450

FROM: Jason S. Feldmar
OUR REF.: G&C 30566.73-US-01
TELEPHONE: (310) 642-4141

Total pages, including cover letter: **60**

PTO FAX NUMBER: (703) 746-7238

If you do NOT receive all of the pages, please telephone us at (310) 641-8797, or fax us at (310) 641-8798.

Title of Document Transmitted:	**BRIEF OF APPELLANTS IN TRIPLICATE**
Applicant:	Robert E. Bou et al.
Serial No.:	09/585,508
Filed:	June 1, 2000
Group Art Unit:	2174
Our Ref. No.:	G&C 30566.73-US-01

By: Jason S. Feldmar
Name: Jason S. Feldmar
Reg. No.: 39,187

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.

Signature

10/13/03
Date

JSF/sjm

G&C 30566.73-US-01

Due Date: October 12, 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Robert E. Bou et al.	Examiner:	Le V. Nguyen
Serial No.:	09/585,508	Group Art Unit:	2174
Filed:	June 1, 2000	Docket:	G&C 30566.73-US-01
Title:	METHOD AND APPARATUS FOR INFERRED SELECTION OF OBJECTS		

CERTIFICATE OF MAILING OR TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being filed via facsimile transmission to the U.S. Patent and Trademark Office on October 13, 2003.

By: _____
Name: Jason S. Feldmar

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

We are transmitting herewith the attached:

☒ Transmittal sheet, in duplicate, containing a Certificate of Mailing or Transmission under 37 CFR 1.8.
☒ Brief of Appellants in triplicate.

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers, if appropriate.

Please charge all fees to Deposit Account No. 50-0494 of Gates & Cooper LLP. A duplicate of this paper is enclosed.

CUSTOMER NUMBER 22462
GATES & COOPER LLP
Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, CA 90045
(310) 641-8797

By: _____
Name: Jason S. Feldmar
Reg. No.: 39,187
JSF/sjm

10/23/2003 EWARREN 00000002 500494 09585508
01 FC:1252 410.00 DA

#12
1 of 3

Due Date: October 11, 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	
Inventor: Robert E. Bou et al.	Examiner: Le V. Nguyen
Serial #: 09/585,508	Group Art Unit: 2174
Filed: June 1, 2000	Appeal No.: _____
Title: METHOD AND APPARATUS FOR INFERRED SELECTION OF OBJECTS	

BRIEF OF APPELLANTS

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In accordance with 37 CFR §1.192, Appellants hereby submit the Appellants' Brief on Appeal from the final rejection in the above-identified application, in triplicate, as set forth in the Office Action dated May 12, 2003 and the Advisory Action dated July 28, 2003.

I. REAL PARTY IN INTEREST

10/23/2003 EHARREN 00000003 500494 09585508
01 FC:1402 330.00 DA

The real party in interest is Autodesk, Inc., the assignee of the present application.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

III. STATUS OF CLAIMS

Claims 1-18 are pending in the application.

Claims 1-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Edwards et al. ("Edwards", U.S. Patent No. 6,459,442) in view of Screen Dumps of Microsoft Windows 4.0 ("MS

Win"). These rejections are being appealed.

IV. STATUS OF AMENDMENTS

No amendments to the claims have been made subsequent to the final Office Action.

V. SUMMARY OF THE INVENTION

Appellants' invention, as recited in independent claims 1, 7, and 13 are generally directed to selecting objects (page 12, lines 2-3). Specifically, existing objects (that are displayed in a viewport [page 21, lines 7-8]) are examined to determine and obtain a relationship between them (page 21, lines 11-13). Based on the relationship, a virtual object is created (page 21, lines 13). The claims specify that the virtual object is not specifically stroked (page 12, lines 6-10; page 17, lines 3-7). Further, as defined in the specification and consistently used in the claims, a "virtual object" is an object that has been created and is not displayed (see page 18, lines 6-19).

Following creation of the virtual object, a selection set is then created that contains the virtual object and one or more of the existing objects (see page 21, line 17-page 22, line 2). In other words, the virtual object and one or more existing objects are grouped together into a selection set for later use.

A request from a user (i.e., a selection from a user) is subsequently obtained and examined to determine if an object (i.e., either a virtual object or existing object) in the selection set is being selected (see page 22, line 3). If an object in the set has been selected, all of the objects (including the virtual object and the existing objects) in the set are also selected (page 22, lines 3-8). Thus, various selection sets are created and when the user selects an object that is in one of the selection sets, all of the objects in the selection set are selected. As described in the specification, this provides the ability to select an entire dashed line merely by selecting empty spaces in the dashed line (since the empty "virtual" object spaces and the actual line segment objects are in the same selection set). In the prior art, the dashed line could only be selected using actual line existing/displayed line segments.

Dependent claims 2, 8, and 14 further elaborate and describe the existing objects and virtual objects. Specifically, two of the existing objects are line segments and one of the virtual objects is a

connector connecting the two line segments. In other words, this claim provides for a dashed line with the empty spaces between line segments being connectors (see page 18, lines 6-19).

Dependent claims 3, 9, and 15 depend on claims 2, 8, and 14 respectively and further provide that the cursor is located between the two line segments when the selection request from the user is obtained. In other words, these claims provide that the user is selecting an empty space between line segments.

Dependent claims 4, 10, and 16 further elaborate on the relationships between the existing objects. These claims provide that the relationship is based on the placement of the existing objects. In other words, depending on how existing objects are placed in a drawing, a relationship between the existing objects may be established and used to create a "virtual" object.

Dependent claims 5, 11, and 17 again elaborate on the relationships between the existing objects. Specifically, these claims provide that the relationships are based on the similarities between the existing objects. In other words, depending on how similar one existing object is to another existing object, a relationship between the two objects may be established and used to create a "virtual" object.

Dependent claims 6, 12, and 18 provide for replying to a query using the objects in the selection set. For example, various types of queries may be used in the invention. One type of query exists when a user is querying areas for "crossing" objects (i.e., does this building pad cross any gas lines) (see page 17, lines 2-7). Alternatively, an automated query may be conducted (e.g., in a script) (see page 17, lines 11-13).

VI. ISSUES PRESENTED FOR REVIEW

Whether claims 1-18 are unpatentable under 35 U.S.C. § 103(a) as being rendered obvious by Edwards in view of MS Win.

VII. GROUPING OF CLAIMS

The rejected claims do not stand or fall together. Each claim is independently patentable. Separate arguments for the patentability of each claim are provided below.

VIII. ARGUMENTS

A. The Independent Claims Are Patentable Over The Prior Art

In the final Office Action dated May 12, 2003, independent claims 1, 7, and 13 were rejected as follows:

> As per claim 1, Edwards teaches a computer-implemented method for selecting objects comprising:
>
> displaying a two-dimensional viewport of one or more existing objects maintained within a three-dimensional space represented in a computer-implemented graphics system (fig. 29; col. 12, lines 42-44);
>
> obtaining a selection request from a user using a cursor selection device while locating the cursor in the two-dimensional viewport (col. 12; lines 44-46; *the graphics system keeps track of where the cursor is so that users may manipulate objects*);
>
> examining the existing objects to obtain one or more relationships between the existing objects (col. 12, lines 37-40);
>
> creating one or more virtual objects based on the relationships (col. 14, lines 40-43);
>
> creating a selection set comprised of at least one of the existing objects and at least one of the virtual objects based on the relationships (fig. 17; *selection set comprising of existing object 426d, existing object 426e and virtual object 1702*);
>
> determining if the selection request is for an object in the selection set, and if the selection request is for an object in the selection set, selecting all of the objects in the selection set (fig. 17; *'ab' is grouped to become one entity –user clicks on 'a' and 'ab' is selected, user clicks on 'b' and 'ab' is selected*). Edwards does not specifically disclose the method of selecting objects that are not specifically stroked based on th relationship. MS Win teaches a method of selecting objects that are not specifically stroked based on a relationship (figs. 3-7; *objects 300 and 400 are grouped to become one entity – after mouse clicking on 300(x) and pressing ctrl+clicking on 400(y), user clicks on x and xy is selected, user clicks on y and xy is selected; when users right click on either x or y then select the command "Open" from the Pop-up menu, the "Open" command will be carried out for both x as shown in fig. 7 and y as shown in fig. 6*). Therefore, it would have been obvious to an artisan at the time of the invention to include MS Win's teaching of a method of selecting objects that are not specifically stroked based on a relationship wherein related objects are grouped using non-stroked means to Edward's method of selecting objects based on the relationship in order to provide users with an alternative method in selecting.
>
> Claims 7 and 13 are similar in scope to claim 1 and are therefore rejected under similar rational.

Appellants submitted a Request for Reconsideration (in which the claims were not amended) on July 9, 2003. In response to the Request for Reconsideration, an Advisory Action was mailed on July 28, 2003. The Advisory Action merely restates the prior rejections (while citing the same portions of the same references) and fails to respond to the submitted arguments, as follows:

> ...Applicant's arguments in a Request for Reconsideration have been fully considered but they are not persuasive. Applicant argued the following:
>
> Neither Edward nor MS Win teach, disclose, or suggest, a virtual object that is not specifically stroked and in particular creating a virtual object based on a relationship between two existing objects, examining existing objects to obtain a relationship between such existing objects, creating a selection set comprising existing objects AND a virtual object and

selecting all objects in a set (including a virtual object and existing objects) when any object in the set is selected.

The Examiner disagrees for the following reasons:

Since the claim language only recites a) a virtual object that is not specifically stroked as well as creating a virtual object based on a relationship between two existing objects, b) examining existing objects to obtain a relationship between such existing objects, and c) creating a selection set comprising existing objects and a virtual object and selecting all objects in a set (including a virtual object and existing objects) when any object in the set is selected and Edwards and MS Win teaches a) a virtual object that is not specifically stroked (MS Win: figs. 3-7) as well as creating a virtual object based on a relationship between two existing objects (Edwards: col. 14, lines 40-43; col. 12, lines 42-44), b) examining existing objects to obtain relationship between such existing objects (Edwards: col. 12, lines 37-40), c) creating a selection set comprising existing objects and a virtual object and selecting all objects in a set (including a virtual object and existing objects) when any object in the set is selected (Edwards: fig. 17), the limitation is still well read in by the modified teaching of Edwards and MS Win.

Appellants respectfully disagree with the above rejection and the conclusion in the Advisory Action for one or more of the following reasons:

(1) Neither Edward nor MS Win teach, disclose, or suggest examining existing objects to obtain a relationship between such existing objects;

(2) Neither Edward nor MS Win teach, disclose, or suggest a virtual object;

(3) Neither Edward nor MS Win teach, disclose, or suggest a virtual object that is not specifically stroked;

(4) Neither Edward nor MS Win teach, disclose, or suggest creating a virtual object based on a relationship between two existing objects;

(5) Neither Edward nor MS Win teach, disclose, or suggest creating a selection set comprising existing objects AND a virtual object; and

(6) Neither Edward nor MS Win teach, disclose, or suggest selecting all objects in a set (including a virtual object and existing objects) when any object in the set is selected.

Edwards merely describes a freeform display editing system that groups freeform strokes into one or more segments on a display. Each segment in the system defines a region of the display that includes a collection of strokes. Multiple behaviors can be dynamically attached or removed from any given segment, even after a segment has been created and filled with strokes. Each behavior provides a task-specific application to the segment to which it is attached. Segments de-couple interpretations of input data from behaviors to provide temporal multiplexing of task-

specific applications. Advantageously, data associated with a segment can be composed at the same time by different behaviors. (See Edwards' Abstract)

As illustrated throughout Edward's specification and figures, Edwards provides a general system for applying application behaviors to freeform data (see Title). In this regard, when a user is writing in freeform, Edwards provides the capability to join the new freeform data with already existing freeform data (see col. 6, lines 51-67; col. 10, lines 2-27). Further, behaviors may be assigned to the combined freeform data (referred to as a segment) (see col. 2, lines 7-18). However, Edwards completely fails to even remotely describe using such freeform data to create a virtual object that is added to the set containing the freeform data.

Edwards refers to the grouping of strokes together into a segment (see col. 10, lines 19-21). Edward's segments are presented to a user within a boundary that surrounds the strokes (col. 10, lines 21-22). If a new stroke is drawn within a segment (i.e., within the boundary), the new stroke is merely added to the existing segment (see col. 10, lines 22-24). If the new stroke is drawn outside of the segment (i.e., outside of the boundary), a new segment may be created (see col. 10, lines 25-27). However, Edwards use of boundaries and segments still fails to teach the a virtual object or the creation of a virtual object. Instead, there is merely a boundary around the freeform stroke data.

The Office Action (and Advisory Action) relies on col. 12, lines 37-40 to teach the claimed element of "examining the existing objects to obtain one or more relationships between the existing objects." Col. 12, lines 37-40 provides:

> ...In addition, this behavior will predict a subsequent drawing based upon the spatial relationship among an input stroke and existing painted strokes in a segment (see for example candidates 2802 and 2804 FIG. 28).

Edwards' input stroke is a freeform stroke input by a user using an input (e.g., cursor) device (see col. 2, lines 35-38 for example). Therefore, the relied upon lines of text illustrate that the spatial relationship exists between a stroke input from a user and existing painted strokes. Such a relationship is clearly different and distinguishable from the claimed relationship that is based on existing objects (and not newly created input from a user stroke). In this regard, Edward's relationship between a new user stroke and an existing painted stroke does not teach, disclose, or suggest a relationship between two existing objects as claimed.

The Office Action and Advisory Action rely on col. 14, lines 40-43 and col. 12, lines 42-44 to teach the element of creating one or more virtual objects based on relationships between existing objects. Col. 14, lines 40-43 provide:

> It will be appreciated by those skilled in the art that the shape defining the bounded region of a segment need not be rectangular as illustrated in the Figures. Instead, the bounded region of a segment may for example have an oval or circular shape.

Similarly, col. 12, lines 42-44 provides:

> A three dimensional drawing behavior automatically constructs a 3D model based on a two dimensional freeform input stroke (see FIG. 29).

Referring to the col. 14 text, such language does not describe the creation of a virtual object whatsoever. The claims provide for a virtual object that is not specifically stroked. In other words, it is an area that is not displayed on the screen and is not drawn by a user. For example, a virtual object may comprise the empty space between strokes in a dashed line (as set forth in the dependent claims). Stating that a bounded region can be a variety of shapes (as in col. 14, lines 40-43) has no impact whatsoever and does not even remotely allude to such a virtual object. Further, the virtual object is based on the relationship between the two existing objects. The above citation to Edward does not even remotely describe such a reliance on a relationship between two existing objects.

Referring to the col. 12 text, the 3D model referenced in Edwards is not even remotely equivalent to a virtual object as claimed. As identified in the referenced FIG. 29, when a user draws a 2D stroke, Edwards provides for automatically constructing a representative 3D model of the 2D stroke. However, as illustrated by the next few lines of text in col. 12, lines 47-49:

> ...The behavior renders the model by adding painted strokes representing visible silhouette edges to the segment's stroke set.

Thus, the 3D model is specifically rendered by adding visible painted strokes to an existing segment. In this regard, such visible painted strokes cannot be and are not equivalent to a "virtual" object as claimed and described in the present specification. Further, as claimed, the virtual object is created based on a relationship between existing objects. However, in Edwards, the 3D model is simply based on a 2D stroke and not based on any relationship whatsoever.

The Office Action and Advisory Action fail to state exactly what objects or portion of Edwards is equivalent to the claimed virtual object. However, in addition to the characterizations described above, Appellants assume that the Office Action may also intend to equate Edward's

bounded region to the claimed virtual object. However, as described above, the bounded region is merely a region or visual density surrounding a segment that is specifically stroked (see col. 6, lines 59-62). Edwards describes the ability to join two segments into a single bounded region (see col. 10, lines 19-23). However, the creation of a combined segment that merely consists of two stroked segments is not even remotely similar to a virtual object that is not specifically stroked. In this regard, a single bounded region that contains two stroked segments teaches away from a virtual object that is not stroked. Edwards' single bounded region is not the same, nor does it suggest the virtual object. Instead, if anything, the bounded region could potentially suggest the claimed selection set. However, nothing in Edwards describes the bounded region containing a virtual object that was not specifically stroked (as in the claims). Accordingly, the bounded region cannot possibly teach or suggest the selection set or the virtual object as claimed.

The Office Action continues and provides that item 1702 of Fig. 17 is a virtual object. Fig. 17 follows:

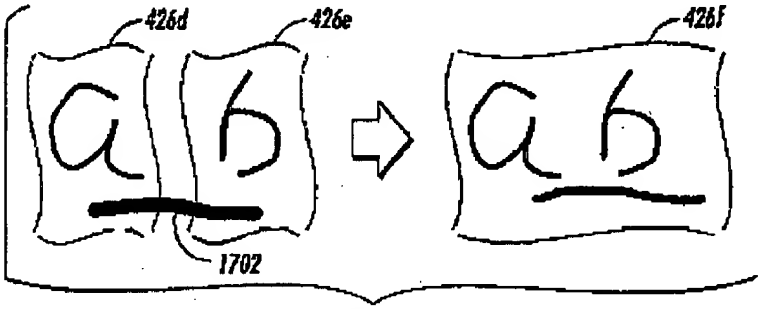


FIG. 17

As illustrated in Fig. 17, item 1702 is displayed and is a stroke. Accordingly, contrary to the present claims, item 1702 is specifically stroked. Further, col. 10, lines 36-53 describe Fig. 17 and 18. Based on the description, item 1702 is a joining stroke specifically drawn by the user that comprises a horizontal line that extends from one segment to the other. Thus, item 1702 is clearly not a virtual object as claimed. Instead, item 1702 is a stroke that is drawn by a user and displayed on a screen (in contrast to an object that is not specifically stroked as claimed).

Additionally, stroke 1702 is not created based on the relationship between objects 426d and 426e. Instead, stroke 1702 is created based on the stroke of a user. Accordingly, the creation of stroke 1702 is not the creation of a virtual object based on a relationship between two existing objects.

Further, since stroke 1702 is not a virtual object, item 426f cannot be a set comprised of an existing object and a virtual object. In this regard, as displayed, item 426f includes stroke 1702 that is specifically stroked (and therefore not a virtual object). Further, Edwards teaches away from adding a virtual object to the set. For example, referring to input strokes (strokes from a user) and associating the input stroke with segments at col. 6, lines 65-68, Edwards provides: "In either case, the input stroke is not added to the selected segment's associated set of painted strokes 420 (i.e., output strokes)." Accordingly, Edwards specifically provides that the stroke is not added to the set of existing objects. Thus, even if Edward's input stroke is considered a "virtual object" as claimed, it is not added to the set. In this regard, Edwards teaches away from the invention as claimed.

The Office Action continues and states that in Fig. 17, if the user clicks on 'a', 'ab' is selected and if the user clicks on 'b', 'ab' is selected. Fig. 17 merely shows two text objects 426d and 426e being joined using a join stroke 1702. There is no indication, explicit or implicit, in the text of Edwards or the Figure, that indicates that if the user clicks on either 'a' or 'b' that the entire segment will be selected. Further, the claims provide for the selection of any object in the set resulting in the selection of all of the objects. In other words, if the letter 426d, letter 426e, and stroke 1702 were all part of the set, the claims provide that if line 1702 is selected, object 426a and 426e would also be selected. Edwards fails to teach such a selection.

In addition to selecting 'ab' if 'a' or 'b' is selected, the claims specifically provide for the selection of the virtual object as well (such a selection is provided in the claims by the selection of all of the objects in the selection set wherein the selection set specifically comprises an existing object AND a virtual object). Thus, if Edwards met the claim limitations, the selection of 'a' or 'b' would result in the selection of 'ab' AND line 1702 (and not just the selection of 'ab'). Edwards and the Office Action fail to describe such a selection whatsoever. Further, as described above, the input stroke (i.e., line 1702) is clearly excluded from the selected set (see col. 6, lines 65-68).

In response to the above arguments (which were submitted in response to a first office Action mailed on October 29, 2002, the final Office Action provides:

> Edwards teaches how users' create one or more objects based on relationships by bounding a region to let the system know users' intent to create objects wherein the objects may be 3D virtual objects (col. 14, lines 40-43; col 12, lines 42-44). Furthermore, Edwards teaches how to create a virtual object based on a relationship between two existing objects, as evident in fig. 17 wherein users may not select 'a' without 'b' also being selected and vice versa after the relationship has been established.

Appellants respectfully disagree with the above assertions in the final Office Action. In this regard, col. 14, lines 40-43 and col. 12, lines 42-44 are relied upon to suggest that objects may be 3D virtual objects. Col. 12, lines 42-44 describes a 3D model based on a 2D freeform input stroke. Such a freeform input stroke is clearly not a virtual object since it is an actual stroke, unlike the claimed virtual object that is not specifically stroked. Further, col. 14, lines 40-43 merely describes that a bounded region may be various shapes. Such a disclosure completely fails to describe a virtual object whatsoever. In addition, neither of these cited sections refer to 3D virtual objects or an intent to create such 3D virtual objects (as asserted in the final Office Action).

The above final Office Action assertions and Advisory Action assertions also allege that Fig. 17 of Edwards provides that 'a' may not be selected without 'b' also being selected and vice versa after the relationship has been established. Firstly, there is no depiction (in Edwards) of such a dependent-based selection in Fig. 17 itself. In addition, nowhere in Edwards is there any description of such a dependency based selection and/or the lack of ability to select one without the other. Such an assertion clearly improperly construes and adds language to Edwards specification.

In addition to the above, even if the user may not select 'a' without 'b' (which Appellants traverses), the selection of multiple objects (i.e., 'a' and 'b') is not equivalent to the creation of a virtual object that is also selected when another object in a set (that contains the virtual object) is selected. Such a creation and selection is not present anywhere in Edwards.

In view of the lack of Edward's capability to teach selecting objects as claimed, the final Office Action and Advisory Action relies on printouts from Microsoft Windows. In this regard, the final Office Action asserts that various icons may be selected while holding down a <CTRL> key. In this regard, the Office Action asserts that after clicking on one icon, the user may hold down the <CTRL> key and select another icon and thereby combining/grouping the two icons together. Thereafter, the Office Action asserts that the user can either click on the first icon or second icon

and both icons are selected. In addition, the final Office Action asserts that when the user right clicks while the cursor is over either icon, a menu command is displayed allowing the user to execute the "open" command which is executed for both icons.

Appellants disagree with the above assertions. Firstly, Appellants respectfully requested a textual description that explains how such selections are occurring in MS Win in response to the final Office Action. Such a textual description has not been provided to date. Accordingly, Appellants assume that no such textual description exists. Based on experimenting with a computer executing Windows 2000, the assertions in the Office Action are not true. Appellants agree that by holding down the <CTRL> key, two icons may be selected. However, after both icons are selected, you cannot click on one and select both. Instead, clicking on one (while the <CTRL> key is not selected) merely reselects the icon that is clicked on (thereby deselecting the other icon). If the <CTRL> key is held down, the icon that is clicked is merely deselected. Accordingly, both icons are not selected. In addition, the fact still remains that a virtual object, in addition to the icons, is not selected as part of a selected set. In this regard, no virtual object is selected as claimed.

Further, the Office Action asserts that by right clicking, the user may execute the "open" command against both icons. Appellants agree that both applications represented by both icons may be opened in this manner. However, such execution and opening of represented applications does not open a virtual object (nor does it open an application represented by a virtual icon). Merely opening applications represented by both icons does not read on the claims whatsoever and is irrelevant with respect to the claims. Such actions merely indicate that the specifically selected and stroked icons (i.e., both x and y had to be specifically stroked and selected to make the group) may be opened using a single command. Once again, nowhere is there any indication or use of a virtual object or a selection of a virtual object.

In addition to the above, Appellants note that the claims provide that the objects are maintained in a 3D space represented in a computer-implemented graphics system. The MS Win icons are not maintained in 3D space. Instead, MS Win's icons are merely icons displayed on a screen in an operating system. The use and comparison of icons displayed on a screen within an operating system is not even remotely similar to a graphics system and a 3D space within such a system. In this regard, MS Win is non-analogous art to Edwards and the present invention. The

MPEP §706.02(j) provides that "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." There is no such suggestion or motivation in either MS Win or Edwards. Further, there is no such motivation or suggestion in the knowledge generally available to one of ordinary skill in the art. Accordingly, it is improper to combine the references as done in the Office Action.

In addition to the above, it is clear that Edwards merely relates to the use of strokes by a user and the recognition and association of such strokes with a segment. Edwards does not address selecting objects using virtual objects created by a system for areas that are not specifically stroked. Further, MS Win fails to select a virtual object as claimed and is in a completely different technological field that that of the present invention. Accordingly, both Edwards and MS Win relate to and address a completely different problem and solution from that of the present invention. In this regard, Appellants' invention solves problems not recognized by either Edwards or MS Win. Moreover, the various elements of Appellants' claimed invention together provide operational advantages over Edwards and MS Win.

In view of the above, the Appellants submits that independent claims 1, 7, and 13 are allowable over Edwards and MS Win.

B. Claims 2, 8, and 14 are Not Separately Argued

C. Claims 3, 9, and 15 are Patentable Over the Prior Art

Dependent claims 3, 9, and 15 depend on claims 2, 8, and 14 respectively. As described above, these claims provide that the cursor is located between the two line segments when the selection request from the user is obtained. In other words, these claims provide that the user is selecting an empty space between line segments. To teach this claim element, the Office Action relies on Fig. 17, element 426f. However, element 426f of Fig. 17 does not indicate, implicitly or explicitly, that a space between two line segments is selected by a user. In fact, Fig. 17 completely fails to show an empty space between line segments. Without showing such an empty space, Edwards cannot possibly teach the selection of such a space by a user. For these reasons and the

reasons set forth with respect to the independent claims, Appellants submit that claims 3, 9, and 15 are patentable over Edwards and MS Win.

D. Claims 4, 10, and 16 are Not Separately Argued

E. Claims 5, 11, and 17 are Not Separately Argued

F. Claims 6, 12, and 18 are Patentable Over the Prior Art

As described above, dependent claims 6, 12, and 18 provide for replying to a query using the objects in the selection set.

In rejecting these claims, the Office Action relies on Edwards col. 6, lines 34-38 which provides:

> The freeform display editing system defines strokes as the universal primitive for both data input and output. In one embodiment, the user's input at the display is provided in the form of freeform strokes (i.e., input strokes), and the feedback provided to the user is in the form of a collection of handwriting style strokes (i.e., painted or output strokes).

Appellants note that such language of Edwards (and the remainder of Edwards) does not even remotely refer to a query. In fact, an electronic search of Edwards for the term "query" provides no results. Merely providing feedback to a user is not equivalent to a query. In this regard, Edward's feedback may not and does not appear to be the result of a query. A query as defined in the present specification, may be used when a user is querying areas for "crossing" objects (i.e., does this building pad cross any gas lines) (see page 17, lines 2-7). Alternatively, an automated query may be conducted (e.g., in a script) (see page 17, lines 11-13). No such similar queries or prompting by a user or for a user is taught or suggested in Edwards. In this regard, there is no indication that feedback is requested in the form of a query.

In addition, based on the language of Edwards, the feedback provided is merely a collection of handwriting style strokes and not a selection set as claimed. The claimed selection set has a specific meaning as set forth in the claims and specification (and as described above). Namely, the selection set is a set comprising one (or more) existing object(s) and one (or more) virtual object(s). The collection of handwriting style strokes is not even remotely similar to such a selection set.

Instead, the handwriting style strokes are merely strokes that are painted/output/rendered on a display (see col. 6, lines 33-42).

Thus, Appellants submit that neither Edwards nor MS Win teach, disclose, or suggest, these dependent claims.

IX. Conclusion

In light of the above arguments, Appellants respectfully submits that the cited references do not anticipate nor render obvious the claimed invention. More specifically, Appellants' claims recite novel physical features which patentably distinguish over any and all references under 35 U.S.C. §§ 102 and 103. As a result, a decision by the Board of Patent Appeals and Interferences reversing the Examiner and directing allowance of the pending claims in the subject application is respectfully solicited.

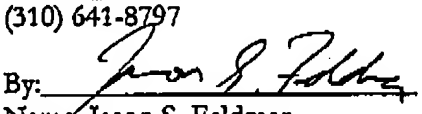
Respectfully submitted,

GATES & COOPER LLP

Attorneys for Appellant(s)

Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, California 90045
(310) 641-8797

Date: October 13, 2003

By: 

Name: Jason S. Feldmar

Reg. No.: 39,187

JSF/

G&C 30566.73-US-01

APPENDIX

1. (PREVIOUSLY AMENDED) A computer-implemented method for selecting objects comprising:

displaying a two-dimensional viewport of one or more existing objects maintained within a three-dimensional space represented in a computer-implemented graphics system;

obtaining a selection request from a user using a cursor selection device while locating the cursor in the two-dimensional viewport;

examining the existing objects to obtain one or more relationships between the existing objects;

creating one or more virtual objects that are not specifically stroked based on the relationships;

creating a selection set comprised of at least one of the existing objects and at least one of the virtual objects based on the relationships;

determining if the selection request is for an object in the selection set; and

if the selection request is for an object in the selection set, selecting all of the objects in the selection set.

2. (ORIGINAL) The method of claim 1 wherein at least two of the existing objects are line segments and at least one of the virtual objects is a connector connecting the two line segments.

3. (ORIGINAL) The method of claim 2 wherein the cursor is located between the two line segments when the selection request is obtained.

4. (ORIGINAL) The method of claim 1 wherein the relationships are based on a placement of the existing objects.

5. (ORIGINAL) The method of claim 1 wherein the relationships are based on similarities between the existing objects.

6. (ORIGINAL) The method of claim 1 further comprising replying to a query using the objects in the selection set.

7. (PREVIOUSLY AMENDED) A computer-implemented graphics system for selecting objects comprising:

a computer having a monitor attached thereto;

a graphics program executing on said computer;

means, performed by the graphics program, for displaying a two-dimensional viewport of three-dimensional space displayed by the graphics program;

means, performed by the graphics program, for obtaining a selection request from a user using a cursor selection device while locating the cursor in the two-dimensional viewport;

means, performed by the graphics program, for examining the existing objects to obtain one or more relationships between the existing objects;

means, performed by the graphics program, for creating one or more virtual objects that are not specifically stroked based on the relationships;

means, performed by the graphics program, for creating a selection set comprised of at least one of the existing objects and at least one of the virtual objects based on the relationships;

means, performed by the graphics program, for determining if the selection request is for an object in the selection set; and

means, performed by the graphics program, for selecting all of the objects in the selection set if the selection request is for an object in the selection set.

8. (ORIGINAL) The system of claim 7 wherein at least two of the existing objects are line segments and at least one of the virtual objects is a connector connecting the two line segments.

9. (ORIGINAL) The system of claim 8 wherein the cursor is located between the two line segments when the selection request is obtained.

10. (ORIGINAL) The system of claim 7 wherein the relationships are based on a placement of the existing objects.

11. (ORIGINAL) The system of claim 7 wherein the relationships are based on similarities between the existing objects.

12. (ORIGINAL) The system of claim 7 further comprising means, performed by the graphics program, for replying to a query using the objects in the selection set.

13. (PREVIOUSLY AMENDED) An article of manufacture embodying logic for selecting objects in a computer-implemented graphics system, the logic comprising:

displaying a two-dimensional viewport of one or more existing objects maintained within a three-dimensional space represented in a computer-implemented graphics system;

obtaining a selection request from a user using a cursor selection device while locating the cursor in the two-dimensional viewport;

examining the one or more existing objects to obtain one or more relationships between the existing objects;

creating one or more virtual objects that are not specifically stroked based on the relationships;

creating a selection set comprised of at least one of the existing objects and at least one of the virtual objects based on the relationships;

determining if the selection request is for an object in the selection set; and

if the selection request is for an object in the selection set, selecting all of the objects in the selection set.

14. (ORIGINAL) The article of manufacture of claim 13 wherein at least two of the existing objects are line segments and at least one of the virtual objects is a connector connecting the two line segments.

15. (ORIGINAL) The article of manufacture of claim 14 wherein the cursor is located between the two line segments when the selection request is obtained.

16. (ORIGINAL) The article of manufacture of claim 13 wherein the relationships are based on a placement of the existing objects.

17. (ORIGINAL) The article of manufacture of claim 13 wherein the relationships are based on similarities between the existing objects.

18. (ORIGINAL) The article of manufacture of claim 13 further comprising replying to a query using the objects in the selection set.